CENTERS FOR DISEASE CONTROL

August 4, 1989 / Vol. 38 / No. 30

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Pneumococcal Immunization Program — California, 1986–1988

Pneumococcal infections are an important cause of morbidity and mortality in the elderly. Many of these infections can be prevented through immunization with pneumococcal polysaccharide vaccine. In 1986, the Immunization Unit of the California State Department of Health Services (CSDHS) received state funding for a 2-year trial program of publicly funded pneumococcal immunizations for senior citizens and others at high risk for infection. This report summarizes the results of that program.

In the first year of the program, CSDHS distributed 58,060 doses of pneumococcal vaccine to 56 local health departments. To promote the vaccine, the local health departments were encouraged to use either of two strategies:

Provide the vaccine during scheduled fall influenza clinics. Each fall, up to 500,000 California residents (primarily persons ≥65 years of age) receive publicly purchased influenza vaccine through local health department-sponsored outreach clinics, health-center clinics, and nursing and convalescent homes. Promoting and providing pneumococcal vaccine at these sites simultaneously with influenza vaccine would enable health-care providers to vaccinate optimal numbers of senior citizens.

Provide the vaccine through other scheduled health department clinics. Where pneumococcal vaccine could not be provided at influenza clinics (e.g., because adequate staff were not available), local health departments were encouraged to promote pneumococcal immunizations through leaflets, posters, and staff recommendations, with subsequent referrals either to a specific pneumococcal vaccine clinic held by the health department at a later date or to a publicly funded preventive health-care clinic for the aging.

From July 1986 through June 1987, the 56 participating departments administered 24,280 (41.8%) of the 58,060-dose inventory of pneumococcal vaccine.* Twenty of the departments administered 13,604 (60.9%) of 22,354 pneumococcal vaccine doses during their influenza clinics (Table 1). Twenty-four departments promoted pneumococcal immunization at their influenza clinics but referred patients to other locations, where 5982 (31.9%) of 18,756 doses were administered. Nineteen departments that neither provided nor promoted the pneumococcal vaccine at their fall influenza clinics administered 4694 (27.7%) of 16,950 doses (Table 1).

In the program's second year, the Immunization Unit developed special promotional materials to assist local health departments and emphasized administering pneumococcal vaccine at influenza clinics. From July 1987 through June 1988, 59

*Remaining doses were available for use in 1987–88; pneumococcal vaccine has a shelf life of 2 years from date of manufacture.

Pneumococcal Immunization — Continued

local health departments administered 44,257 (64.1%) of 69,054 doses of pneumococcal vaccine—an 82.3% increase over the number of doses administered in the first year. Subsequently, the CSDHS secured an ongoing annual state appropriation to purchase pneumococcal vaccine.

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Editorial Note: Pneumococcal polysaccharide vaccine is recommended for 1) adults with chronic illnesses, especially cardiovascular and chronic pulmonary diseases; 2) adults with chronic illnesses (e.g., splenic dysfunction or anatomic asplenia, Hodgkin disease, multiple myeloma, cirrhosis, alcoholism, and renal failure) specifically associated with increased risk for pneumococcal disease or its complications; 3) adults with cerebrospinal fluid leaks and conditions associated with immunosuppression; and 4) otherwise healthy persons ≥65 years of age (*1*).

Despite these recommendations, in 1985 <10% of the estimated 47.9 million persons considered to be at high risk for pneumococcal infections reported having ever received pneumococcal vaccine (CDC, United States Immunization Survey, unpublished data, 1985). The 1990 national objective for pneumococcal vaccine coverage in high-risk groups is 60%. Although vaccine and administration costs are reimbursed under the Medicare program, this objective is unlikely to be met nationwide (*2*).

TABLE 1. Doses and proportions of pneumococcal vaccine inventories administered by county health departments, by service delivery method — California, 1986–87 and 1987–88*

	Simultaneous administration of pneumococcal and influenza vaccines		Promotion of and referral for pneumococcal vaccination		No simultaneous administration or promotion/ referral		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
County health departments participating								
1986–87	20	(35.7)	24	(42.9)	12	(21.4)	56	(100.0)
1987–88	34	(57.6)	19	(32.2)	6	(10.2)	59	(100.0)
Doses in inventory								
1986–87	22,354	(38.5)	18,756	(32.3)	16,950	(29.2)	58,060	(100.0)
1987–88	54,020	(78.2)	14,621	(21.2)	415	(0.6)	69,056	(100.0)
Doses administered								
1986–87	13,604	(56.0)	5,982	(24.6)	4,694	(19.3)	24,280	(100.0)
1987–88	40,323	(91.1)	3,764	(8.5)	170	(0.4)	44,257	(100.0)
Proportion of inventory administered								
1986–87	—	(60.9)	—	(31.9)	—	(27.7)	—	(41.8)
1987–88	—	(74.6)	—	(25.7)	—	(41.0)	—	(64.1)

*Vaccine allocations to local health departments were determined by the estimated proportion of persons aged ≥65 years residing in each county.

Pneumococcal Immunization – Continued

Each year in the United States, pneumococcal infection causes an estimated 150,000–570,000 cases of pneumonia, 16,000–55,000 cases of bacteremia, and 2600–6200 cases of meningitis (*3*) and causes or contributes to 40,000 deaths. The 23-valent polysaccharide vaccine contains capsular types that cause 88% of bacteremic pneumococcal disease (*1*). Pneumococcal vaccine is estimated to be 60% efficacious in clinical groups at moderate to high risk for infection, although two recent studies in veterans' hospitals failed to demonstrate efficacy in high-risk veterans (*1*). Assuming an overall vaccine efficacy of 60% with 60% coverage, an estimated 12,000 deaths related to pneumococcal disease might be prevented annually (*3*).

The success in increasing pneumococcal vaccine coverage in California may be directly related to efforts to encourage local health departments to both offer and administer the vaccine at public influenza immunization clinics. This approach appears to be more effective than promotion of pneumococcal vaccine during influenza immunization clinics with subsequent referral of prospective vaccinees to other sites for vaccination. These findings are consistent with a previous study that indicated that influenza vaccination programs can be used to identify candidates for whom pneumococcal vaccine, other vaccines, and toxoids are recommended (*4*).

Recommendations for pneumococcal immunization from health-care providers can influence a patient's decision to be vaccinated, even when the patient initially has a negative perception of the vaccine or its benefits (*5*). Therefore, health-care providers should assess each patient's immunization status and, when indicated, provide influenza and pneumococcal vaccines as well as other vaccines recommended for adults (diphtheria and tetanus toxoids and measles-mumps-rubella and hepatitis B vaccines) (*6,7*).

References

1. ACIP. Pneumococcal polysaccharide vaccine. MMWR 1989;38:64–8,73–6.
2. CDC. Progress toward achieving the national 1990 objectives for immunization. MMWR 1988;37:613–7.
3. Williams WW, Hickson MA, Kane MA, Kendal AP, Spika JS, Hinman AR. Immunization policies and vaccine coverage among adults: the risk for missed opportunities. Ann Intern Med 1988;108:616–25.
4. Grabenstein JD, Smith LJ, Carter DW, et al. Comprehensive immunization delivery in conjunction with influenza vaccination. Arch Intern Med 1986;146:1189–92.
5. CDC. Adult immunization: knowledge, attitudes, and practices—DeKalb and Fulton Counties, Georgia, 1988. MMWR 1988;37:657–61.
6. ACIP. Adult immunization: recommendations of the Immunization Practices Advisory Committee. MMWR 1984;33(suppl 1S).
7. Committee on Immunization. Guide for adult immunization. Philadelphia: American College of Physicians, Council of Medical Societies, 1985.

Weight-Loss Regimens Among Overweight Adults – Behavioral Risk Factor Surveillance System, 1987

To reduce the prevalence of overweight and related chronic diseases in the United States, the 1990 national health objectives proposed that "by 1990, 50 percent of the overweight population should have adopted weight loss regimens, combining an appropriate balance of diet and physical activity" (*1*). Data from 33 health departments (32 states and the District of Columbia) that participated in the 1987 Behavioral Risk Factor Surveillance System (BRFSS) were used to evaluate state-specific prog-

Weight-Loss Regimens — Continued

ress toward achieving this objective. The BRFSS collects data on behavioral risk factors through random-digit–dialed telephone interviews of adults ≥18 years old (*2*).

Prevalence estimates of weight-loss regimens among overweight persons were derived from self-reported data. Survey respondents were asked if they were trying to lose weight. Those responding affirmatively were also asked if they were eating fewer calories and if they were increasing physical activity to lose weight. Based on their answers, respondents were classified as eating fewer calories, increasing physical activity, or doing both. Overweight was defined as a body mass index (BMI = weight [kg]/height [m]^2) ≥27.8 for men and ≥27.3 for women. These values represent the sex-specific 85th percentile of BMI for U.S. adults aged 20–29 years, as estimated from the Second National Health and Nutrition Examination Survey (*3*).

The median prevalence of using the recommended weight-loss regimen (eating fewer calories and increasing physical activity) was 20.2% for overweight men and 31.4% for overweight women. Among men, the prevalence ranged from 12.9% in

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TABLE I. Summary — cases of specified notifiable diseases, United States

Disease	30th Week Ending			Cumulative, 30th Week Ending		
	July 29, 1989	July 30, 1988	Median 1984-1988	July 29, 1989	July 30, 1988	Median 1984-1988
Acquired Immunodeficiency Syndrome (AIDS)	328	U*	304	19,541	17,773	7,156
Aseptic meningitis	232	136	300	3,156	2,806	3,110
Encephalitis: Primary (arthropod-borne & unspec)	9	15	28	353	425	519
Post-infectious	-	2	2	51	71	71
Gonorrhea: Civilian	9,254	13,907	16,905	369,594	387,983	462,858
Military	128	204	382	6,167	7,006	9,524
Hepatitis: Type A	586	521	444	19,358	14,105	12,585
Type B	385	464	484	12,908	12,752	14,371
Non A, Non B	51	39	69	1,378	1,506	2,067
Unspecified	51	46	65	1,400	1,209	2,657
Legionellosis	17	17	18	527	533	405
Leprosy	3	2	2	92	96	131
Malaria	31	25	30	663	471	492
Measles: Total†	128	53	53	8,479	1,801	2,123
Indigenous	126	37	37	8,099	1,603	1,860
Imported	2	16	10	380	198	244
Meningococcal infections	35	40	40	1,762	1,927	1,838
Mumps	113	77	77	3,480	3,215	2,977
Pertussis	51	93	76	1,435	1,366	1,209
Rubella (German measles)	3	3	22	278	136	377
Syphilis (Primary & Secondary): Civilian	960	871	684	23,182	21,883	15,935
Military	4	5	4	148	101	104
Toxic Shock syndrome	7	12	11	214	197	206
Tuberculosis	489	541	511	12,127	11,750	12,049
Tularemia	8	4	10	75	107	107
Typhoid Fever	14	4	7	252	198	181
Typhus fever, tick-borne (RMSF)	35	32	32	297	335	347
Rabies, animal	99	79	79	2,724	2,420	2,894

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1989		Cum. 1989
Anthrax	-	Leptospirosis (Va. 1)	62
Botulism: Foodborne	14	Plague	3
Infant	7	Poliomyelitis, Paralytic	-
Other	5	Psittacosis (Ala. 1, Wyo. 1)	56
Brucellosis (Va. 2, Okla. 1, Calif. 1)	51	Rabies, human	1
Cholera	-	Tetanus (Okla. 1)	30
Congenital rubella syndrome	1	Trichinosis	15
Congenital syphilis, ages < 1 year	81		
Diphtheria	1		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.
†One of the 128 reported cases for this week was imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending July 29, 1989 and July 30, 1988 (30th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	19,541	3,156	353	51	369,594	387,983	19,358	12,908	1,378	1,400	527	92
NEW ENGLAND	841	160	13	2	10,725	11,801	405	631	50	53	36	6
Maine	41	9	5	-	163	237	8	29	3	1	5	-
N.H.	30	17	-	-	89	150	41	40	8	4	1	-
Vt.	8	11	1	-	40	81	26	46	5	-	-	-
Mass.	444	48	5	2	4,095	4,120	123	380	23	36	23	4
R.I.	49	27	-	-	788	1,042	23	42	3	3	7	1
Conn.	269	48	2	-	5,560	6,171	184	94	8	9	-	1
MID. ATLANTIC	5,630	311	48	5	46,514	61,696	2,317	1,974	121	182	129	10
Upstate N.Y.	577	139	15	4	8,424	7,643	537	386	52	6	42	1
N.Y. City	2,955	64	2	1	20,647	28,013	223	748	24	153	12	7
N.J.	1,407	-	31	-	7,893	8,692	251	376	11	5	26	1
Pa.	691	108	-	-	9,550	17,348	1,306	466	34	18	49	1
E.N. CENTRAL	1,543	468	104	3	67,431	62,683	1,089	1,621	165	57	139	3
Ohio	258	98	28	1	17,383	14,057	234	320	26	12	72	-
Ind.	243	86	23	1	5,129	4,721	117	271	20	22	27	1
Ill.	687	77	22	1	21,629	18,362	474	415	63	14	11	2
Mich.	287	182	23	-	18,215	19,992	173	386	35	9	20	-
Wis.	68	26	8	-	5,095	5,551	91	229	21	-	9	-
W.N. CENTRAL	452	131	15	3	17,690	15,770	709	561	59	15	26	1
Minn.	93	5	-	1	1,826	2,172	68	63	12	3	2	-
Iowa	35	19	4	-	1,500	1,210	51	23	10	1	5	-
Mo.	218	53	-	-	10,886	8,958	388	389	20	6	10	-
N. Dak.	5	6	1	-	71	99	4	16	3	1	1	-
S. Dak.	4	6	3	-	148	312	9	6	5	-	1	-
Nebr.	18	6	3	-	873	917	55	14	-	2	2	1
Kans.	81	36	4	2	2,586	2,102	134	50	9	2	5	-
S. ATLANTIC	3,978	631	56	20	106,286	110,150	1,661	2,485	203	217	72	1
Del.	55	25	1	-	1,741	1,645	27	92	5	4	7	-
Md.	412	80	11	2	11,405	11,043	402	432	18	21	16	-
D.C.	312	6	-	-	7,067	8,107	4	18	2	-	-	-
Va.	307	93	24	-	8,851	7,658	190	169	39	142	5	-
W. Va.	28	11	11	-	803	787	11	55	6	3	-	-
N.C.	278	81	4	1	15,886	15,756	260	601	56	-	22	1
S.C.	193	14	-	-	9,682	8,418	32	340	3	7	3	-
Ga.	598	58	1	-	20,343	21,115	194	260	9	6	11	-
Fla.	1,793	263	4	17	29,509	35,621	541	518	65	34	8	-
E.S. CENTRAL	462	320	17	1	30,212	30,313	223	913	96	4	19	-
Ky.	70	89	6	1	2,957	2,976	72	251	31	3	3	-
Tenn.	157	48	-	-	10,235	10,218	87	490	20	-	10	-
Ala.	128	126	11	-	9,388	9,586	43	121	41	1	6	-
Miss.	107	56	-	-	7,634	7,521	21	51	4	-	-	-
W.S. CENTRAL	1,695	398	40	2	39,947	43,107	2,191	1,268	91	324	28	14
Ark.	50	12	5	-	4,517	4,166	130	42	9	6	1	-
La.	268	27	8	-	8,389	8,827	175	223	11	1	4	-
Okla.	91	34	9	-	3,443	3,946	235	131	18	19	19	-
Tex.	1,286	325	18	2	23,598	26,168	1,651	872	53	298	4	14
MOUNTAIN	633	116	7	2	8,204	8,468	2,865	847	134	105	32	2
Mont.	10	3	-	-	114	267	34	32	3	2	2	1
Idaho	15	-	-	1	111	226	102	69	9	3	-	-
Wyo.	12	2	-	-	56	129	27	4	2	-	-	-
Colo.	224	54	1	1	1,783	1,956	331	110	40	42	3	-
N. Mex.	52	7	1	-	803	770	371	120	26	2	2	-
Ariz.	168	39	2	-	3,066	3,041	1,500	317	28	47	15	1
Utah	41	9	1	-	246	328	265	63	18	4	6	-
Nev.	111	2	2	-	2,015	1,751	235	132	9	5	4	-
PACIFIC	4,309	621	53	13	43,585	43,995	7,898	2,608	459	443	46	55
Wash.	311	-	2	1	3,454	3,963	1,851	563	133	32	13	5
Oreg.	151	-	-	-	1,700	1,812	1,405	285	49	8	1	1
Calif.	3,740	582	46	12	37,612	37,235	4,049	1,666	267	392	29	45
Alaska	9	9	4	-	541	616	470	35	5	4	1	-
Hawaii	98	30	1	-	278	369	123	59	5	7	2	4
Guam	1	-	-	-	-	87	-	-	-	-	-	-
P.R.	884	60	2	1	607	789	118	137	13	15	-	8
V.I.	26	-	-	-	374	227	-	4	-	-	-	-
Amer. Samoa	-	-	-	-	-	59	-	-	-	-	-	-
C.N.M.I.	-	-	-	-	-	34	-	-	-	-	-	-

N: Not notifiable U: Unavailable C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 29, 1989 and July 30, 1988 (30th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported*		Total									
	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	Cum. 1989	1989	Cum. 1989	1989	Cum. 1989	Cum. 1988	1989	Cum. 1989	Cum. 1988
UNITED STATES	663	126	8,099	2	380	1,901	1,762	113	3,460	51	1,435	1,366	3	278	136
NEW ENGLAND	38	-	270	-	24	107	135	-	62	3	230	173	-	6	2
Maine	-	-	-	-	-	7	13	-	-	-	4	11	-	-	-
N.H.	2	-	8	-	-	87	15	-	10	-	5	33	-	4	-
Vt.	1	-	1	-	-	-	6	-	-	-	6	2	-	1	-
Mass.	22	-	27	-	17	3	67	-	45	-	194	111	-	1	1
R.I.	6	-	38	-	3	-	3	-	-	3	11	4	-	-	1
Conn.	7	-	196	-	4	10	31	-	7	-	10	12	-	-	-
MID. ATLANTIC	105	3	553	-	160	652	252	8	196	4	73	85	1	21	12
Upstate N.Y.	20	-	41	-	96	20	84	6	125	3	42	39	1	8	2
N.Y. City	35	3	56	-	14	41	31	2	18	1	3	1	-	13	7
N.J.	25	-	279	-	-	89	55	-	11	-	14	4	-	-	1
Pa.	25	-	177	-	50	502	82	-	42	-	14	21	-	-	2
E.N. CENTRAL	55	22	1,587	1	57	177	221	64	401	-	143	163	-	21	23
Ohio	8	-	626	-	35	23	85	63	114	-	33	25	-	3	-
Ind.	7	-	51	-	-	57	26	-	23	-	13	55	-	-	-
Ill.	24	-	684	-	-	69	60	-	129	-	49	23	-	16	19
Mich.	10	22	91	15	8	23	37	1	105	-	26	23	-	1	4
Wis.	6	-	135	-	14	5	13	-	30	-	22	37	-	1	-
W.N. CENTRAL	21	1	493	-	4	11	65	3	356	8	74	79	-	5	-
Minn.	6	1	12	-	-	10	10	-	1	-	11	28	-	-	-
Iowa	2	-	4	-	1	-	2	2	26	-	11	19	-	1	-
Mo.	7	-	237	-	-	1	28	1	49	8	46	14	-	3	-
N. Dak.	1	-	-	-	-	-	-	-	-	-	-	11	-	-	-
S. Dak.	1	-	-	-	-	-	6	-	-	-	1	3	-	-	-
Nebr.	1	-	108	-	2	-	12	-	5	-	3	-	-	-	-
Kans.	3	-	132	-	1	-	7	-	275	-	2	4	-	1	-
S. ATLANTIC	114	34	418	-	29	256	294	5	572	9	116	135	-	8	16
Del.	3	-	58	-	1	-	2	-	1	-	1	4	-	-	-
Md.	19	-	35	-	16	11	52	3	342	2	12	26	-	2	1
D.C.	5	-	7	-	3	-	15	-	80	-	-	-	-	-	-
Va.	20	-	19	-	3	143	28	-	68	-	9	16	-	-	11
W. Va.	2	23	51	-	-	6	10	-	10	-	17	4	-	-	-
N.C.	16	-	167	-	-	1	42	-	20	2	23	37	-	1	-
S.C.	4	-	-	-	-	-	15	-	18	-	-	1	-	-	-
Ga.	9	-	1	-	1	-	53	-	11	-	16	20	-	-	1
Fla.	36	11	80	-	5	95	77	2	22	5	38	27	-	5	3
E.S. CENTRAL	8	-	161	-	-	64	56	-	136	1	58	39	-	2	-
Ky.	-	-	20	-	-	35	33	-	9	-	1	12	-	-	-
Tenn.	1	-	96	-	-	-	4	-	62	-	18	13	-	2	-
Ala.	6	-	45	-	-	-	16	-	15	1	37	12	-	-	-
Miss.	2	-	-	-	-	29	3	N	N	-	2	2	-	-	-
W.S. CENTRAL	35	63	2,983	-	39	14	114	18	1,197	1	123	72	-	36	6
Ark.	-	-	1	-	2	1	6	2	124	-	16	7	-	-	2
La.	2	-	9	-	-	-	31	7	488	-	6	11	-	5	-
Okla.	4	-	121	-	-	8	16	2	177	1	20	27	-	1	1
Tex.	29	63	2,852	-	37	5	61	7	408	-	81	27	-	30	3
MOUNTAIN	16	3	299	-	19	131	49	6	127	8	417	391	-	32	5
Mont.	1	-	12	-	1	16	1	-	2	4	21	1	-	1	-
Idaho	2	-	-	-	2	1	2	4	13	-	52	249	-	29	-
Wyo.	1	-	-	-	-	-	-	-	7	-	-	1	-	1	-
Colo.	2	-	59	-	1	114	18	2	21	1	23	14	-	-	1
N. Mex.	1	-	16	-	15	-	1	N	N	-	7	10	-	-	-
Ariz.	6	3	112	-	-	-	22	-	76	3	300	93	-	-	-
Utah	-	-	100	-	-	-	5	-	3	-	13	22	-	-	3
Nev.	3	-	-	-	-	-	-	-	5	-	1	1	-	1	1
PACIFIC	271	-	1,335	1	48	389	576	9	413	17	201	249	2	147	72
Wash.	22	-	20	-	12	2	60	1	32	10	73	51	-	-	-
Oreg.	15	-	-	1†	16	3	41	N	N	-	7	15	-	2	-
Calif.	225	-	1,297	-	12	372	470	8	369	7	117	129	2	122	50
Alaska	3	-	-	-	-	-	4	-	1	-	-	6	-	-	-
Hawaii	6	-	18	-	8	12	1	-	11	-	4	48	-	23	22
Guam	-	U	-	U	-	1	-	U	-	U	-	-	U	-	1
P.R.	1	-	414	-	-	190	4	-	8	-	4	9	-	6	1
V.I.	-	U	4	U	-	-	-	U	11	U	-	-	U	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
C.N.M.I.	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.
N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending July 29, 1989 and July 30, 1988 (30th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1988	Cum. 1989	Cum. 1989	Cum. 1989	Cum. 1989
UNITED STATES	23,182	21,883	214	12,127	11,750	75	252	297	2,724
NEW ENGLAND	956	617	7	331	299	2	20	5	5
Maine	5	9	3	12	16	-	-	-	1
N.H.	3	6	-	16	6	-	-	-	1
Vt.	-	2	-	5	2	-	-	-	-
Mass.	299	243	1	171	177	2	10	2	1
R.I.	17	19	-	37	26	-	5	1	-
Conn.	632	338	3	90	72	-	5	2	2
MID. ATLANTIC	4,243	4,410	34	2,290	2,275	2	69	35	392
Upstate N.Y.	480	293	5	188	306	1	11	8	15
N.Y. City	2,209	2,787	2	1,287	1,175	-	41	3	-
N.J.	791	518	9	395	404	-	11	17	-
Pa.	763	802	18	420	390	1	6	7	377
E.N. CENTRAL	1,039	679	31	1,289	1,284	3	26	43	65
Ohio	73	65	9	230	253	-	4	22	5
Ind.	40	34	5	114	135	1	2	15	2
Ill.	445	315	5	576	541	-	16	4	15
Mich.	338	229	12	294	295	1	3	2	6
Wis.	143	36	-	75	60	1	1	-	37
W.N. CENTRAL	185	136	26	293	297	35	5	42	370
Minn.	24	13	7	62	44	-	1	-	72
Iowa	21	15	4	28	26	-	2	1	110
Mo.	94	80	5	124	152	24	1	37	26
N. Dak.	1	2	-	10	9	-	-	1	37
S. Dak.	-	-	3	15	21	6	-	1	55
Nebr.	17	20	5	14	9	1	-	-	35
Kans.	28	6	2	40	36	4	1	2	36
S. ATLANTIC	8,547	7,934	19	2,500	2,522	2	21	83	834
Del.	96	66	-	22	22	-	2	-	18
Md.	447	448	1	207	254	-	4	12	233
D.C.	529	381	1	111	109	-	2	-	2
Va.	319	246	4	206	226	2	3	5	163
W. Va.	10	7	-	43	48	-	-	2	36
N.C.	557	444	6	304	233	-	2	43	4
S.C.	463	407	3	287	276	-	-	10	133
Ga.	1,821	1,319	3	381	416	-	3	9	145
Fla.	4,305	4,616	1	939	938	-	5	2	100
E.S. CENTRAL	1,607	1,138	5	980	972	6	2	28	228
Ky.	34	38	1	232	238	1	1	8	97
Tenn.	715	501	2	286	267	4	-	18	55
Ala.	488	328	2	278	294	-	1	2	75
Miss.	370	271	-	184	173	1	-	-	1
W.S. CENTRAL	3,234	2,465	21	1,447	1,487	17	11	41	404
Ark.	208	132	1	153	155	9	-	11	53
La.	739	477	-	196	190	-	1	-	3
Okla.	57	90	11	122	146	8	1	28	65
Tex.	2,230	1,766	9	976	996	-	9	2	283
MOUNTAIN	480	451	32	260	327	5	4	18	151
Mont.	1	3	-	11	5	-	-	12	57
Idaho	1	2	2	13	11	-	-	2	2
Wyo.	3	1	2	-	2	-	-	1	46
Colo.	53	69	5	12	47	2	1	3	11
N. Mex.	20	35	3	48	62	1	-	-	15
Ariz.	138	109	9	126	161	-	2	-	16
Utah	12	11	9	24	10	2	1	-	2
Nev.	232	221	2	26	29	-	-	-	2
PACIFIC	2,911	4,053	39	2,737	2,287	3	94	2	275
Wash.	136	130	2	138	124	-	6	-	-
Oreg.	147	172	-	87	87	1	5	1	-
Calif.	2,617	3,722	36	2,385	1,960	2	81	1	213
Alaska	3	8	-	31	24	-	-	-	62
Hawaii	8	21	1	96	92	-	2	-	-
Guam	-	3	-	-	14	-	-	-	-
P.R.	315	359	-	189	113	-	-	-	37
V.I.	2	1	-	4	5	-	-	-	-
Amer. Samoa	-	-	-	-	3	-	-	-	-
C.N.M.I.	-	1	-	-	17	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending July 29, 1989 (30th Week)

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
NEW ENGLAND	547	376	91	51	22	7	33
Boston, Mass.	155	94	28	22	6	5	15
Bridgeport, Conn.	45	28	9	5	3	-	2
Cambridge, Mass.	23	16	3	3	1	-	3
Fall River, Mass.	22	18	3	-	1	-	-
Hartford, Conn.	68	44	11	7	4	2	2
Lowell, Mass.	16	13	1	2	-	-	-
Lynn, Mass.	13	11	2	-	-	-	-
New Bedford, Mass.	18	13	3	1	1	-	-
New Haven, Conn.	35	21	8	4	2	-	1
Providence, R.I.	45	38	6	1	-	-	-
Somerville, Mass.	5	3	1	1	-	-	-
Springfield, Mass.	22	17	2	1	2	-	3
Waterbury, Conn.	27	22	2	2	1	-	3
Worcester, Mass.	53	38	12	2	1	-	4
MID. ATLANTIC	2,783	1,777	556	313	70	73	173
Albany, N.Y.	49	37	7	3	1	1	1
Allentown, Pa.	15	13	1	1	-	-	-
Buffalo, N.Y.	102	73	20	3	2	4	7
Camden, N.J.§	32	21	6	3	2	-	-
Elizabeth, N.J.	26	16	2	4	-	4	5
Erie, Pa.†	42	35	6	1	-	-	7
Jersey City, N.J.	58	40	10	7	-	1	3
N.Y. City, N.Y.	1,418	873	294	189	34	28	74
Newark, N.J.	67	20	20	17	2	6	10
Paterson, N.J.	26	11	8	4	3	-	8
Philadelphia, Pa.	505	315	100	49	18	21	21
Pittsburgh, Pa.†	64	51	10	2	1	-	6
Reading, Pa.	30	23	3	3	1	-	4
Rochester, N.Y.	108	77	21	6	1	3	11
Schenectady, N.Y.	31	21	8	2	-	-	1
Scranton, Pa.†	23	9	8	5	1	-	3
Syracuse, N.Y.	88	59	22	4	1	2	5
Trenton, N.J.	48	29	6	9	1	3	2
Utica, N.Y.	20	18	1	-	1	-	1
Yonkers, N.Y.	31	26	3	1	1	-	4
E.N. CENTRAL	2,311	1,507	506	167	52	79	108
Akron, Ohio	58	37	16	2	2	1	1
Canton, Ohio	54	39	11	4	-	-	1
Chicago, Ill.§	564	362	125	45	10	22	16
Cincinnati, Ohio	130	84	24	11	2	9	18
Cleveland, Ohio	143	87	38	6	7	5	7
Columbus, Ohio	143	87	38	6	7	5	7
Dayton, Ohio	99	66	26	6	-	1	4
Detroit, Mich.	239	129	59	34	9	8	5
Evansville, Ind.	40	27	4	5	2	2	3
Fort Wayne, Ind.	69	44	16	6	2	1	4
Gary, Ind.	8	3	2	3	-	-	-
Grand Rapids, Mich.	83	59	9	6	2	7	6
Indianapolis, Ind.	162	105	41	4	4	8	3
Madison, Wis.	28	20	4	1	2	1	1
Milwaukee, Wis.	153	111	29	10	2	1	3
Peoria, Ill.	49	41	3	2	-	3	5
Rockford, Ill.	44	33	7	3	-	1	8
South Bend, Ind.	67	48	13	3	1	2	1
Toledo, Ohio	119	82	28	7	-	2	10
Youngstown, Ohio	59	43	13	3	-	-	5
W.N. CENTRAL	737	532	129	40	24	12	41
Des Moines, Iowa	53	42	6	3	1	1	3
Duluth, Minn.	28	21	4	2	1	-	-
Kansas City, Kans.§	59	45	9	4	1	-	2
Kansas City, Mo.	109	68	27	5	5	4	9
Lincoln, Nebr.	45	38	5	1	1	-	2
Minneapolis, Minn.	175	124	31	12	6	2	15
Omaha, Nebr.	76	47	20	4	4	1	5
St. Louis, Mo.	104	79	17	3	3	2	4
St. Paul, Minn.	50	37	8	2	1	2	-
Wichita, Kans.	38	31	2	4	1	-	1

Reporting Area	All Causes, By Age (Years)						P&I**
	All Ages	≥65	45-64	25-44	1-24	<1	Total
S. ATLANTIC	1,164	690	232	159	36	46	78
Atlanta, Ga.	160	88	31	27	5	9	7
Baltimore, Md.	202	113	43	32	8	6	15
Charlotte, N.C.	87	47	21	15	1	3	4
Jacksonville, Fla.	114	67	23	20	3	1	13
Miami, Fla.	82	46	19	15	2	-	3
Norfolk, Va.	55	41	6	2	3	3	4
Richmond, Va.	75	50	11	10	1	3	9
Savannah, Ga.	71	47	16	4	3	1	10
St. Petersburg, Fla.	76	58	12	3	-	3	5
Tampa, Fla.	79	41	21	8	4	4	6
Washington, D.C.	129	63	24	23	6	13	1
Wilmington, Del.	34	29	5	-	-	-	1
E.S. CENTRAL	722	458	155	61	28	20	36
Birmingham, Ala.	128	74	23	14	7	10	1
Chattanooga, Tenn.	48	34	9	3	1	1	3
Knoxville, Tenn.	93	65	17	6	2	3	11
Louisville, Ky.	89	55	17	7	7	3	6
Memphis, Tenn.	165	105	38	18	4	-	9
Mobile, Ala.	33	28	1	2	2	-	1
Montgomery, Ala.	45	24	18	1	1	1	-
Nashville, Tenn.	121	73	32	10	4	2	5
W.S. CENTRAL	1,658	1,001	363	183	66	44	55
Austin, Tex.	64	42	9	10	2	1	5
Baton Rouge, La.	26	19	2	4	1	-	3
Corpus Christi, Tex.	39	26	8	1	1	3	-
Dallas, Tex.	213	115	52	26	14	6	1
El Paso, Tex.	60	43	8	4	2	3	4
Fort Worth, Tex	82	43	23	4	6	6	3
Houston, Tex.§	734	436	169	89	24	16	18
Little Rock, Ark.	65	43	14	6	-	2	-
New Orleans, La.	84	48	19	10	6	1	-
San Antonio, Tex.	155	87	35	22	7	3	12
Shreveport, La.	55	42	6	4	1	2	6
Tulsa, Okla.	81	57	18	3	2	1	3
MOUNTAIN	639	398	117	53	27	44	49
Albuquerque, N. Mex.	60	37	13	6	4	-	7
Colo. Springs, Colo.	39	27	3	2	3	4	3
Denver, Colo.	127	77	21	11	1	17	4
Las Vegas, Nev.	104	59	22	12	5	6	8
Ogden, Utah	20	14	2	-	2	2	5
Phoenix, Ariz.	125	77	19	13	7	9	7
Pueblo, Colo.	27	22	3	2	-	-	7
Salt Lake City, Utah	45	27	9	3	2	4	3
Tucson, Ariz.	92	58	25	4	3	2	5
PACIFIC	1,780	1,118	319	201	59	56	103
Berkeley, Calif.	17	11	2	3	-	1	-
Fresno, Calif.	97	58	16	11	4	8	6
Glendale, Calif.	17	13	-	3	1	-	-
Honolulu, Hawaii	52	37	7	4	2	2	9
Long Beach, Calif.	72	50	15	2	2	3	9
Los Angeles Calif.	465	271	89	68	21	9	15
Oakland, Calif.	71	44	14	6	2	5	5
Pasadena, Calif.	43	31	2	5	2	3	5
Portland, Oreg.	114	82	18	7	3	4	8
Sacramento, Calif.	148	92	34	12	4	6	12
San Diego, Calif.	133	82	22	23	4	2	8
San Francisco, Calif.	145	86	29	23	4	3	1
San Jose, Calif.	180	114	40	15	4	7	11
Seattle, Wash.	114	75	19	12	6	2	6
Spokane, Wash.	53	43	7	2	-	1	2
Tacoma, Wash.	39	29	5	5	-	-	6
TOTAL	12,331††	7,857	2,468	1,228	384	381	676

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

§Data not available. Figures are estimates based on average of past available 4 weeks.

Weight-Loss Regimens — Continued

Maine to 35.5% in Missouri (Table 1). For women, the prevalence ranged from 19.1% in the District of Columbia to 41.9% in Utah (Table 2).

The median prevalence of eating fewer calories to lose weight was 43.6% among overweight men and 63.9% among overweight women. For men, the prevalence ranged from 30.6% in Rhode Island to 57.7% in Missouri (Table 1). Among women, the prevalence ranged from 47.7% in New Mexico to 72.3% in South Dakota (Table 2).

The median prevalence of increasing physical activity to lose weight was 24.3% for overweight men and 34.7% for overweight women. Among men, the prevalence ranged from 16.8% in North Carolina to 38.6% in Missouri (Table 1). For women, the prevalence ranged from 23.4% in Ohio to 50.7% in Utah (Table 2).

Reported by: The following BRFSS coordinators: R Strickland, Alabama; T Hughes, Arizona; L Parker, California; M Rivo, District of Columbia; S Hoecherl, Florida; JD Smith, Georgia; E Tash, Hawaii; J Mitten, Idaho; B Steiner, Illinois; S Joseph, Indiana; K Bramblett, Kentucky; R Schwartz, Maine; A Weinstein, Maryland; L Koumijian Yandel, Massachusetts; N Salem, Minnesota; N Hudson, Missouri; R Moon, Montana; R Thurber, Nebraska; K Zaso, New Hampshire; L Pendley, New Mexico; H Bzduch, New York; C Washington, North Carolina; B Lee, North Dakota; E Capwell, Ohio; J Cataldo, Rhode Island; D Lackland, South Carolina; L Post, South Dakota; D Riding, Tennessee; J Fellows, Texas; C Chakley, Utah; K Tollestrup, Washington; R Anderson, West Virginia; and R Miller, Wisconsin. Div of Nutrition and Office of Surveillance and Analysis, Center for Chronic Disease Prevention and Health Promotion, CDC.

Editorial Note: Previous studies have indicated that an effective weight-loss regimen incorporates both reduced caloric intake and increased physical activity (*4,5*). The BRFSS data suggest that no state will meet the 1990 objective to have 50% of the overweight population adopt this regimen. The use of physical activity appears to be the limiting factor. More than half of the overweight adults surveyed were eating fewer calories to lose weight, but less than one third were increasing physical activity. Moreover, only 25% of overweight adults were using both caloric restriction and increased physical activity to lose weight. Men were less likely than women to be using any weight-loss regimen. There is no apparent association between weight-loss regimens and state-specific prevalence of overweight (*6*).

The low prevalence of increasing physical activity to lose weight may reflect 1) the sedentary lifestyle of U.S. adults (*7*) and 2) the emphasis on diet as a means of weight loss without adequately addressing the benefits of physical activity. The benefits of combining physical activity with diet education are demonstrated by the Zuni Diabetes Project (*8*). Participants in an ongoing exercise-education program lost a mean of 9 pounds, compared with a mean loss of 2 pounds for nonparticipants (*9*). As in this project, public health agencies and health-care providers should incorporate conveniently scheduled exercise classes, on-site health education and health assessment, reward incentives, and community involvement into weight-control programs.

References

1. Public Health Service. Promoting health/preventing disease: objectives for the nation. Washington, DC: US Department of Health and Human Services, Public Health Service, 1980.
2. Remington PL, Smith MY, Williamson DF, Anda RF, Gentry EM, Hogelin GC. Design, characteristics, and usefulness of state-based behavioral risk factor surveillance: 1981–87. Public Health Rep 1988;103:366–75.
3. NCHS, Najjar MF, Rowland M. Anthropometric reference data and prevalence of overweight —United States, 1976–80. Hyattsville, Maryland: US Department of Health and Human Services, Public Health Service, 1987; DHHS publication no. (PHS)87-1688. (Vital and health statistics; series 11, no. 238).
4. National Institutes of Health Consensus Development Panel. Health implications of obesity: National Institutes of Health Consensus Development Conference statement. Ann Intern Med 1985;103(6 pt 2):1073–7.

Weight-Loss Regimens — Continued

TABLE 1. Prevalence of weight-loss regimens among overweight* men in selected states — Behavioral Risk Factor Surveillance System, 1987

State	Sample size	Recommended weight-loss regimen†		Eating fewer calories		Increasing physical activity	
		%	95% CI§	%	95% CI§	%	95% CI§
Alabama	96	23.5	± 9	43.6	±11	27.7	± 9
Arizona	86	22.7	± 9	47.5	±11	30.7	±10
California	155	24.8	± 7	54.4	± 8	31.3	± 8
District of Columbia	89	18.5	± 9	40.1	±11	25.7	±10
Florida	106	16.7	± 8	41.5	±11	19.6	± 9
Georgia	129	22.8	± 8	47.4	± 9	25.3	± 8
Hawaii	157	13.4	± 7	33.4	±10	23.1	± 9
Idaho	134	23.2	± 8	37.5	± 9	28.8	± 9
Illinois	160	25.2	± 7	49.9	± 8	31.2	± 8
Indiana	245	25.1	± 6	43.7	± 7	32.3	± 6
Kentucky	164	17.8	± 7	39.6	± 9	23.5	± 8
Maine	112	12.9	± 6	41.5	±10	17.0	± 7
Maryland	68	24.3	±11	44.1	±13	31.6	±12
Massachusetts	127	15.7	± 7	46.3	±10	21.0	± 8
Minnesota	318	19.6	± 5	43.4	± 6	23.7	± 5
Missouri	124	35.5	± 9	57.7	±10	38.6	± 9
Montana	94	19.1	± 8	42.1	±10	20.2	± 8
Nebraska	108	18.6	± 8	33.2	± 9	27.0	± 9
New Hampshire	91	25.7	±10	47.5	±10	34.9	±12
New Mexico	88	28.5	±11	38.7	±11	32.0	±11
New York	87	14.0	± 8	43.6	±12	18.6	± 9
North Carolina	148	14.4	± 6	41.2	± 8	16.8	± 7
North Dakota	170	15.9	± 5	38.2	± 8	21.5	± 6
Ohio	170	19.9	± 7	49.8	± 9	22.5	± 7
Rhode Island	134	20.2	± 8	30.6	± 9	24.3	± 9
South Carolina	185	20.6	± 7	42.0	± 8	22.7	± 7
South Dakota	121	18.4	± 7	44.4	±10	23.5	± 8
Tennessee	222	22.6	± 6	44.9	± 7	24.1	± 6
Texas	118	22.1	± 8	42.3	± 9	28.3	± 9
Utah	109	31.4	± 9	54.7	±10	34.9	± 9
Washington	109	18.4	± 7	45.0	±10	23.3	± 8
West Virginia	171	16.6	± 7	38.2	± 8	21.6	± 7
Wisconsin	168	25.7	± 7	48.0	± 8	33.0	± 8

*Defined as body mass index (Wt [kg]/Ht [m]^2) ≥27.8 for men.
†Defined as eating fewer calories and increasing physical activity.
§Confidence interval.

Weight-Loss Regimens — Continued

TABLE 2. Prevalence of weight-loss regimens among overweight* women in selected states — Behavioral Risk Factor Surveillance System, 1987

State	Sample size§	Recommended weight-loss regimen† %	95% CI¶	Eating fewer calories %	95% CI¶	Increasing physical activity %	95% CI¶
Alabama	157	31.6	± 8	68.1	± 8	33.1	± 8
Arizona	118	39.0	± 9	71.3	± 9	44.8	± 9
California	164	25.4	± 7	62.0	± 8	29.8	± 7
District of Columbia	151	19.1	± 6	55.9	± 9	25.1	± 7
Florida	128	34.0	±10	61.3	± 9	41.0	±10
Georgia	138	26.0	± 8	62.3	± 9	26.0	± 8
Hawaii	151	25.9	±10	54.2	±12	34.7	±10
Idaho	223	38.4	± 7	66.4	± 7	45.8	± 7
Illinois	217	26.2	± 6	63.6	± 8	28.8	± 7
Indiana	290	31.8	± 6	64.7	± 6	35.7	± 6
Kentucky	220	22.5	± 6	54.9	± 7	26.9	± 6
Maine	150	26.3	± 8	69.1	± 8	27.5	± 8
Maryland	137	34.1	±10	71.7	± 8	37.0	±10
Massachusetts	135	22.6	± 7	68.0	± 9	24.1	± 8
Minnesota	331	32.6	± 6	67.0	± 5	36.1	± 6
Missouri	171	32.8	± 8	63.9	± 8	37.9	± 8
Montana	109	41.2	±10	71.0	± 9	43.5	±11
Nebraska	144	20.9	± 7	57.1	± 9	26.4	± 8
New Hampshire	119	31.2	± 9	69.2	± 8	37.2	±10
New Mexico	81	38.4	±11	47.7	±12	43.6	±12
New York	137	26.8	± 8	49.9	± 9	30.5	± 9
North Carolina	208	28.6	± 7	57.2	± 8	32.5	± 7
North Dakota	201	37.6	± 7	66.8	± 7	41.4	± 7
Ohio	195	21.6	± 6	70.1	± 6	23.4	± 6
Rhode Island	183	31.4	± 7	61.6	± 8	32.0	± 7
South Carolina	196	29.3	± 7	58.6	± 8	30.2	± 7
South Dakota	146	30.1	± 9	72.3	± 8	33.2	± 9
Tennessee	270	29.4	± 6	58.0	± 6	31.6	± 6
Texas	130	35.7	± 9	66.0	± 9	39.7	±10
Utah	125	41.9	±10	67.4	± 9	50.7	±10
Washington	141	31.4	± 8	57.9	± 9	36.8	± 8
West Virginia	234	32.5	± 7	61.0	± 7	35.9	± 7
Wisconsin	167	34.4	± 8	66.0	± 8	37.7	± 8

*Defined as body mass index (Wt [kg]/Ht [m]^2) ≥27.3 for women.
†Defined as eating fewer calories and increasing physical activity.
§Pregnant women were excluded from the analysis.
¶Confidence interval.

Weight-Loss Regimens — Continued

5. Council on Scientific Affairs, American Medical Association. Treatment of obesity in adults. JAMA 1988;260:2547–51.
6. CDC. Prevalence of overweight—Behavioral Risk Factor Surveillance System, 1987. MMWR 1989;38:421–3.
7. CDC. Sex-, age-, and region-specific prevalence of sedentary lifestyle in selected states in 1985—the Behavioral Risk Factor Surveillance System. MMWR 1987;36:195–8,203–4.
8. Leonard B, Leonard C, Wilson R. Zuni Diabetes Project. Public Health Rep 1986;101:282–8.
9. CDC. Community-based exercise intervention—the Zuni Diabetes Project. MMWR 1987; 36:661–4.

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Table 2 of the article "Chronic Disease Reports: Deaths from Lung Cancer—United States, 1986," calculated population-attributable risks and attributable deaths separately for current and former smokers. Results indicated the proportions and numbers of deaths caused by current smoking (assuming the absence of former smoking) and of former smoking (assuming the absence of current smoking). Methods are available (*1*) to calculate the attributable risks for current and former smoking separately and combined. Overall, 86.7% of lung cancer deaths are attributable to cigarette smoking, 64.4% in current smokers, 22.3% in former smokers.

Reference

1. Morgenstern H, Bursic ES. A method for using epidemiologic data to estimate the potential impact of an intervention on the health status of a target population. J Community Health 1982;7:292–309.

The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333; telephone (404) 332-4555.

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